Azevedo, George

From: Bauer, Candice

Sent: Tuesday, October 17, 2017 1:37 PM

To: Azevedo, George

Subject: FW: Delano WWTP draft NPDES/SDS Permit - Response to EPA Jan 4 2017 Comment

Letter

Attachments: Delano WWTP_Draft NPDES Permit_MN0051250.pdf; Delano WWTP_Fact

Sheet_MN0051250_May 2017.pdf; South Fork Crow River Watershed Non Point Source

Fact Sheet_May 2017.pdf

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From: Blasing, Nicole (MPCA) [mailto:nicole.blasing@state.mn.us]

Sent: Monday, May 15, 2017 3:01 PM

To: Bauer, Candice <bauer.candice@epa.gov>; Ireland, Scott <ireland.scott@epa.gov>; Pierard, Kevin

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Subject: Delano WWTP draft NPDES/SDS Permit - Response to EPA Jan 4 2017 Comment Letter

The attached draft permit and fact sheet for the Delano WWTP has been updated to address comments submitted on January 4, 2017 by the Environmental Protection Agency (EPA) to the Minnesota Pollution Control Agency (MPCA). MPCA's response to the comments are included below:

RESPONSE TO COMMENTS PRE-PUBLIC NOTICED NPDES/SDS PERMIT THE CITY OF DELANO WASTEWATER TREATMENT FACILITY

May 15, 2017

EPA Comment 1: "Water Quality Based Effluent Limits That are Derived from and Comply with Minnesota's River Eutrophication Standards"

EPA and MPCA met on March 14-15, 2017 to discuss MPCA's River Eutrophication Standards implementation procedures and EPA's issues identified within this comment. In the meeting is was agreed that the MPCA would develop a non-point source fact sheet outlining the statewide and major watershed specific non-point source activities and that this fact sheet will be public noticed with the permit. The non-point source fact sheet for the South Fork of the Crow River, where the Delano WWTP is located, is attached to the email.

EPA Comment 2: "Uncertain and Unenforceable Effective Date for Total Phosphorus WQBEL"

Summary of EPA's Comment 2:

- 1. The term "Phase" is used throughout the permit and fact sheet but is not clearly defined. This led to difficulty in understanding when phosphorus limits are applicable and when they are not.
- 2. The effective date of the final phosphorous limit of 0.53 mg/L is not clearly defined in the permit's compliance schedule and limits and monitoring table, or the fact sheet.
- 3. The letter mentions two identical compliance schedules in the permit (5.13.35 and 6.7). An explanation for this is requested.
- 4. MPCA needs to provide more information demonstrating that the compliance schedule to meet the final phosphorus limit is as soon as possible, in accordance with 40 CFR § 122.47.

Summary of MPCA permit changes:

The October 2015 replacement of the MPCA's database has significantly affected permit writing processes and the look and content of our permits. The new database is "Tempo". There are many differences between the two databases; both in how the permit writers write the permit narrative and the look of the permit document. The look of the permit, however, did not change the effluent limitation setting methods or process. An important change to note is that different sets of limits are now referred to as "Phases", rather than "interim" or "final". When reading through the Limits and Monitoring Requirements of a permit, you will now see limits and monitoring parameters with no "Phase" noted. Those parameters apply during the entire five year permit cycle. Additionally you may see parameters with "Phase 1", "Phase 2" or additional Phases noted. The parameters that have a Phase associated with them are only applicable for the period of time defined in the permit, usually in the SD station, compliance schedule, or construction schedule chapters. If there is a "final" limit assigned to the facility it would normally be triggered in "Phase 2" of the permit.

MPCA's response to Comment 2, Item 1:

In 2002 the City of Delano (City) submitted information to the MPCA regarding a WWTF expansion project that they voluntarily initiated to account for future growth within their community. Their voluntary WWTF expansion project is proposed to be completed in two phases. Phase 1 was complete in June 2005. Phase 2 is planned to be completed in 2025. This voluntary WWTF expansion project is separate from the permit requirement to complete the actions necessary to comply with the new phosphorus effluent limit of 0.053 mg/L as soon as possible.

The Tempo database software refers to different sets of limits as "phases," which has made references within the permit to the two separate projects confusing. To add clarification to the permit the voluntary Facility expansion project is now described in the facility description of the draft permit (page 3) and fact sheet (page 7) as:

On October 2, 2002, the Permittee submitted a request for a voluntary facility expansion to increase the design AWWF and associated mass loadings. The Permittee proposed a two-part expansion to accommodate a population increase. Part I, which was completed in June 2005, has an AWWDF of 2.199 mgd and Part II (estimated completion in 2025), will result in an AWWDF of 2.953 mgd. The permit review process included a nondegradation review for Part I of the expansion in accordance with Minn. R. 7050.0185. An Environmental Assessment Worksheet (EAW) was prepared and public noticed for Part I and II of the expansion. The Facility completed construction and initiated operation of Part I of the voluntary expansion on June 30, 2005.

Additionally, the Facility is not currently designed to treat for and achieve compliance with the new phosphorous limit of 0.53 mg/L immediately at permit issuance. Therefore, the permit includes a compliance schedule (permit items 5.13.36 – 5.13.51) for the City to make the modifications necessary to their Facility to achieve compliance with the final (Phase II) phosphorous limit 0.53 mg/L. The MPCA worked with the City to develop a compliance construction schedule that requires them to achieve compliance with the new phosphorus limit as soon as possible (an additional explanation on how as soon as possible was determined is included in #4 below). The final compliance date is June 30, 2021, or 4.5 years after permit issuance.

Additional clarification related to the compliance construction schedule, which requires the permittee to meet the new phosphorus limit, was added into the facility description of the draft permit (page 4) and fact sheet (page 7) as follows:

In this permit reissuance, the Permittee was assigned a new total phosphorus effluent limit of 0.53 mg/L, calendar month average, June – Sept. The existing Facility is not designed to achieve compliance with this new total phosphorus limit and as a result, the permit includes a compliance related construction schedule (5.13.35 - 5.13.51) for the Permittee to complete the operational and facility modifications necessary to achieve compliance with the new total phosphorus effluent limit as soon as possible, but no later than June 30, 2021.

MPCA's response to Comment 2, Item 2:

To add clarity to when the permittee is required to comply with the final, Phase 2, total phosphorus limit of 0.53 mg/L the MPCA added the following language into requirement 5.13.39 and 5.13.50 of the compliance construction schedule in the draft permit (draft Permit Page 15-16):

5.13.39: The Delano Wastewater Treatment Facility's (Facility) discharge has been shown to contribute to elevated total phosphorus and chlorophyll-a (Chl-a) concentrations in the South Fork Crow River. The existing phosphorus limits assigned to the Facility (2430.4 kg/yr, 12 month moving total & 1.0 mg/L, 12 month moving average) were assigned to protect for the nutrient impairment in Lake Pepin and in accordance with Minn. R. Ch. 7053.0255 but are not sufficient to protect waters within the SFCRW. As a result, the Facility was assigned a new total phosphorus water quality based effluent limit (WQBEL) of 0.53 mg/L, calendar month average, June – September. This compliance related construction schedule requires the permittee to complete the Facility modifications necessary to achieve compliance with the new limit as soon as possible, but no later than June 30, 2021. The permit (as described in the limits and monitoring section of the permit) includes Phase 1 (interim) and Phase 2 (final) phosphorus limits as outlined below:

Phase 1 (interim) requirements: 2430.4 kg/yr, 12-month moving total, Jan - Dec 1.0 mg/L, 12-month moving average, Jan - Dec

Phase 2 (final) requirements (effective as soon as possible, but no later than June 30, 2021): 2430.4 kg/yr, 12-month moving total, Jan - Dec 1.0 mg/L, 12-month moving average, Jan - Dec 0.53 mg/L, calendar month average, June - September

5.13.50: The Permittee shall attain compliance with the Phase 2 (final) total phosphorus effluent limit of 0.53 mg/L as soon as possible, but no later than June 30, 2021, which is 90 days after initiation of operation.

Additional information has been included in the compliance schedule section of the Fact Sheet (page 22) to further define when each phase is applicable. This additional information is included in the last two paragraphs of MPCA's response #4.

MPCA's Response to Comment 2, Item 3:

Section 6 on pages 33-35 of the draft permit is called the "Submittal action summary" – this is a checklist for the permittee, not a second compliance schedule. The permittee can remove these pages to have reminders on what needs to be submitted and when.

MPCA's Response to Comment 2, Item 4:

The MPCA included additional language in the compliance schedule section of the fact sheet (page 22) to provide the necessary information to demonstrate that the permit requires compliance as soon as possible, in accordance with 40 CFR § 122.47.

Fact Sheet compliance schedule section replacement language:

The Delano WWTF discharge has been shown to contribute to elevated total phosphorus (TP) and chlorophyll-a (Chl-a) concentrations in the South Fork Crow River. In addition, the WWTF has reasonable potential (RP) to cause or contribute to the excess nutrient impairment in Lake Pepin. The existing limits in the permit were developed to protect for the excess nutrient impairment in Lake Pepin and in accordance with Minn. R. Ch. 7053.0255 but were found to not be sufficient to protect the South fork of the Crow River and the Crow River downstream. The Facility is therefore required to have water quality based effluent limits (WQBELs) designed to protect the receiving water reach of the South Fork Crow River as well as downstream waterbodies. The following WWTF TP limits will not change 2430.4 kg/yr, 12-month moving total, January - December and 1.0 mg/L, 12-month moving average, January - December. The following WQBEL for TP is new as a result of this analysis: 0.53 mg/L, calendar month average, June - September.

The Delano WWTF is not currently designed to meet the level of treatment required to ensure compliance with the newly assigned TP limit of 0.53 mg/L (since 2013 the average effluent phosphorous concentration was 0.74 mg/L, Jun – Sept). As a result, the City of Delano (City) needs time to make the necessary changes in operations and complete the capital improvements necessary to achieve compliance with the new limit. In order to allow the City the necessary time to complete pilot testing, plan, design, and make the necessary operational and capital improvements, the MPCA has include a 4.5 year compliance construction schedule in the permit in accordance with 40 CFR § 122.47. To develop the schedule and timeframe for completion MPCA staff worked with the City to identify the steps the City needed to take and the as soon as possible timeframe for completion of each step.

This draft permit includes a compliance related construction schedule that begins at permit issuance and ends as soon as possible, but not later than June 30, 2021. At that time, the Permittee is required to comply with the final total phosphorus effluent limit of 0.53 mg/L in addition to the current TP limits in the permit. Phase 1 of the permit includes the current TP limits assigned to the Facility. Phase 2 is when the Permittee is required to comply with the newly assigned TP limit of 0.53 mg/L. The TP limits assigned to the Facility are as follows:

Phase 1 (interim) requirements – effective at permit issuance: 2430.4 kg/yr, 12-month moving total, Jan - Dec 1.0 mg/L, 12-month moving average, Jan - Dec

Phase 2 (final) requirements - effective as soon as possible, but no later than June 30, 2021: 2430.4 kg/yr, 12-month moving total, Jan - Dec 1.0 mg/L, 12-month moving average, Jan - Dec 0.53 mg/L, calendar month average, June – September

If you have any questions regarding the response to comments or the updated NPDES/SDS permit and fact sheet for the Delano WWTP you can contact the permit writer Holly Christensen at 218-846-8104 or myself at 218-393-5236.

Thank you,

Nicole Blasing, Supervisor North Central Regional Unit Municipal Wastewater Section Ph. 218-316-3890



Our mission is to protect and improve the environment and enhance human health.